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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,943	02/20/2004	Kai Lehmann	MB 385	4811

27956 7590 02/04/2005

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EXAMINER

ESHETE, ZELALEM

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/783,943	Applicant(s) LEHMANN ET AL. 62	
	Examiner Zelalem Eshete	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed on 1/12/2005.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (6,289,861) in view of Yoshikawa et al. (5,954,019).

Regarding claim 1: Suzuki discloses a device for changing the angle of rotation of shaft relative to drive wheel driving the cam-shaft of an internal combustion engine (see figure 2), said device including hydraulic arrangement which is effective between the drive and camshaft and is connected to a fluid of the internal combustion engine (see abstract) for admitting to said adjusting arrangement via an on/off valve said camshaft being mounted camshaft bearings and said on/off valve being integrated in one of the camshaft bearings (see figure 4). Suzuki further discloses the camshaft bearing having a bearing cover as an integral part of a cylinder head cover of the internal combustion engine (see figure 4; column 4, lines 37 to 41).

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Suzuki fails to disclose the spool valve is extending horizontally.

However, Yoshikawa teaches the spool valve is extending horizontally (see figure 6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vertical arrangement of the spool valve as taught by Suzuki by using horizontal arrangement of the spool valve as taught by Yoshikawa in order to implement an alternative positioning of the spool valve depending upon the engine design.

Regarding claim 4: Suzuki discloses the bearing cover has a receiving bore in which at least part of the on/off valve is accommodated (see figure 4).

Regarding claim 5: Suzuki discloses the hydraulic adjusting arrangement is supplied with fluid via fluid-medium bores arranged in the camshaft bearing (see figure 2; column 5, lines 20 to 25)

Regarding claim 6: Suzuki as modified above discloses the claimed invention as recited above; as to the method of making (cast), a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the two. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983).

Regarding claim 7: Suzuki discloses the camshaft bearing has at least one fluid inlet supplying the on/off valve with fluid (see column 5, lines 1 to 5), at least one fluid outlet for supplying the hydraulic adjusting arrangement with fluid and at least one fluid return flow (see figure 2, numerals 69,73).

Regarding claim 8: Suzuki discloses the fluid supplied to the inlet from the cylinder head in order supply the on/off valve with fluid (see column 6, lines 50 to 54).

Regarding claim 9: Suzuki discloses the fluid is supplied to the inlet from the cylinder head cover or main bearing cap in order to supply the on/off valve fluid (see figure 2; column 4, line 65 to column 5, line 5).

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Yoshikawa, further in view of Urckfitz et al. (6,543,400).

Suzuki as modified above discloses the claimed invention as recited above; however fails to disclose fluid is supplied to the inlet from the camshaft.

However, Urckfitz teaches oil supply route through camshaft (see column 1, lines 5 to 12).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Suzuki as modified above by incorporating

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the oil supply route through the camshaft as taught by Urckfitz as an alternative oil supply means.

Response to Arguments

4. Applicant's arguments filed 1/12/2005 have been fully considered but they are not persuasive.

5. With respect to applicant's argument on page 5: Suzuki discloses a camshaft bearing cover that is an integral part of the cylinder head cover (see figure 4, numerals 36,51,18; column 4, lines 37 to 41). Webster's Dictionary defines the word "integral" as "formed as a unit with another part" (see Webster's 9th New Collegiate Dictionary).

6. With respect applicant's argument on pages 5,6: Applicant's arguments with respect to the positioning of the spool valve have been considered but are moot in view of the new ground(s) of rejection.

7. With respect to applicant's argument on page 5: Suzuki as modified above results low engine height due to the change in the positioning of the spool valve.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zelalem Eshete whose telephone number is (571) 272-4860. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Z


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